

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021497**Date Inspected:** 07-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Mr. An Qing xiang / Mr. Sha zhi			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>

**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Assembly bay- 14.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 08478.

**Magnetic Particle Testing (MT)**

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a MT report for this date. The members are identified as OBG Anchor plate bearing block Components. Total number of welds MT Tested: 6 No's. The bearing block designations inspected were as follows:

1. APBB1-083-11,064-11,087-15,100-12,108-14,095-13

This QA Inspector randomly observed the following work in progress:

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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Shielded Metal Arc Welding (SMAW) welding of weld joint identified as SEG3013AH-176. Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-B-P-2214-TC-U4b-FCM-1.

SMAW welding of weld joint identified as SEG3013AH-095. Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2214-TC-U4b-FCM-1.

SMAW welding of weld joint identified as SEG3020R-020. Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. Sun tian liang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2212-B-U2-FCM-1.

SMAW welding of weld joint identified as EP3030-001-108. Welder is identified as 053148. ZPMC Quality Control (QC) is identified as Mr. Sun tian liang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2212-B-U2-FCM-1.

Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3020AW-089. Welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Sun tian liang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2132-ESAB.

FCAW welding of weld joint identified as SEG3013B-263. Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2232-ESAB.

ZPMC personnel performing weld back gouging for the weld joint identified as SA3231B-001. Refer the attached photos for reference.

ZPMC UT Technician performing Ultrasonic Testing for the weld joint identified as SEG3020U-587. Refer the attached photos for reference.

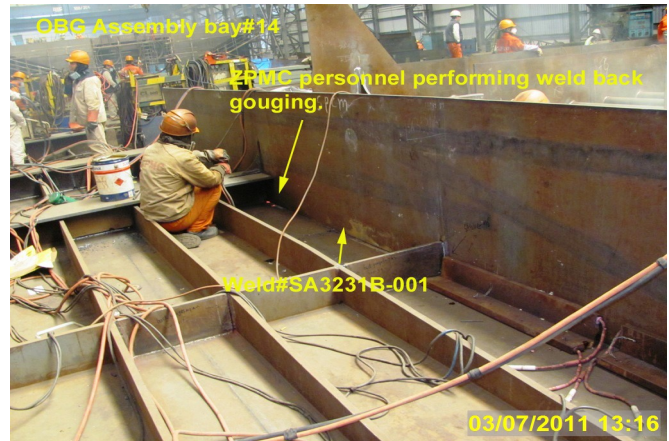
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhu,Surendra

Quality Assurance Inspector

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**Reviewed By:** Peterson,Art

QA Reviewer